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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/788,388	02/21/2001	Sumiyo Okada	1573.1002	5407

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EXAMINER

CHEN, CHONGSHAN

ART UNIT	PAPER NUMBER
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2162

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/788,388

Applicant(s)

OKADA ET AL.

Examiner :

Chongshan Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-11,13-36,38,39,41-55,57-73,75,77,78 and 80-83 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-11,13-36,38,39,41-55,57-73,75,77,78 and 80-83 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Claims 1, 2, 4-11, 13-36, 38, 39, 41-55, 57-73, 75, 77-78, and 80-83 are pending in this Office Action.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7 February 2005 has been entered.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4-11, 13-36, 38, 39, 41-55, 57-73, 75, 77-78, 80, and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norihiko (JP Publication Number: 11-242545) in view of Nishimoto et al. ("Nishimoto", Japanese Patent, Document No. H10-69482).

As per claim 1, Norihiko teaches a message transmitting and receiving apparatus comprising:

a memory, storing keywords associated with said apparatus and degrees of importance of said keywords (Norihiro, [0010]);

a detector, detecting an occurrence of a transmitted or received message; an extractor, in response to the detection of an occurrence of a received message, extracting a keyword from said received message (Norihiro, [0018]-[0025]);

an indicator providing an indication of the occurrence of said extracted keyword within said received message in accordance with the determined degree of importance of said extracted keyword (Norihiro, [0005]-[0012]).

Norihiro discloses determining importance of a keyword ([0005]-[0025]), but Norihiro does not explicitly disclose determining dynamically a degree of importance of said extracted keyword and updating said keywords and said degrees of importance in said memory, wherein the degree of importance of the keywords changes in accordance with time. The examiner interprets the dynamic determining mean as a process in which the importance of a keyword may change based on various conditions during the determining process. Nishimoto teaches a method for determining the importance of a key and the importance of keyword changes during the process based on the appearance frequencies and appearance intervals (Nishimoto, page 11). Therefore, the importance determining mean of Nishimoto is dynamic. Furthermore, the dynamic determining mean of Nishimoto updates the degree of importance accordance with time. In Nishimoto's system, the keyword importance determining mechanism is used in a chat system and based on the appearance intervals of the respective keywords. There is a time difference between the appearances of words because words are spoken/typed by a user one by one, which means there are time differences between the appearance intervals of the keywords.

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Therefore, the key word weight calculation mechanism based on the appearance frequencies and appearance intervals as disclosed by Nishimoto is also based on time. Furthermore, Norihiko teaches raising the degree of importance of the keyword stored in said memory, in response to the detection of an occurrence of the keyword in a message, and lowering the degree of importance of the keyword in the absence of the keyword in messages (Norihiko, [0005]-[0012]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the chat system of Norihiko by incorporating a key word extraction mechanism as disclosed by Nishimoto (Nishimoto, page 11). The motivation being to enable the chat system to extract important key words and enable the user of the chat system to hold the flow of the talk easily.

As per claim 2, Norihiko and Nishimoto teach all the claimed subject matters as discussed in claim 1, and further teach providing at least one of visual and audio indications of an occurrence of said extracted keyword in a manner determined by a degree of importance of said extracted keyword (Norihiko, [0005]).

As per claim 4, Norihiko and Nishimoto teach all the claimed subject matters as discussed in claim 1, and further teach storing a new keyword extracted from a received message in said memory together with a degree of importance of said new keyword (Norihiko, [0018]).

As per claim 5, Norihiko and Nishimoto teach all the claimed subject matters as discussed in claim 1, and further teach said extractor extracts also a candidate keyword from a received message, and said apparatus further comprises a register, storing in said memory, a candidate keyword as a keyword, together with a degree of importance of the candidate keyword,

when a user of the apparatus responds to received message data containing the candidate keyword within a predetermined range (Norihiko, [0019]).

As per claim 6, Norihiko and Nishimoto teach all the claimed subject matters as discussed in claim 5, except for explicitly disclosing said predetermined range is a predetermined number of messages. However, Norihiko discloses said predetermined range is a predetermined number of lines (Norihiko, [0019]). In the real-time chat system of Norihiko, usually one line is one message. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to set the predetermined range as a predetermined number of messages in order to extract keywords from previous messages.

As per claim 7, Norihiko and Nishimoto teach all the claimed subject matters as discussed in claim 5, and further teach said predetermined range is a predetermined number of lines (Norihiko, [0019]).

As per claim 8, Norihiko and Nishimoto teach all the claimed subject matters as discussed in claim 5, except for explicitly disclosing said predetermined range is a predetermined number of words. However, Norihiko discloses said predetermined range is a predetermined number of lines (Norihiko, [0019]). The user would like to set the predetermined range as a predetermined number of words in order to further narrow the range. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to set the predetermined range as a predetermined number of words in order to define how many words the user wants to review.

As per claim 9, Norihiko and Nishimoto teach all the claimed subject matters as discussed in claim 5, except for explicitly disclosing said predetermined range is a predetermined

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number of characters. However, Norihiko discloses said predetermined range is a predetermined number of lines (Norihiko, [0019]). The user would like to set the predetermined range as a predetermined number of characters in order to further narrow the range. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to set the predetermined range as a predetermined number of characters in order to define how many characters the user wants to review.

As per claim 10, Norihiko and Nishimoto teach all the claimed subject matters as discussed in claim 5, and further teach said predetermined range is a predetermined time period (Nishimoto, page 11, In Nishimoto's system, the keyword importance determining mechanism is used in a chat system and based on the appearance intervals of the respective keywords. There is a time difference between the appearance of words because words are spoken by a user one by one, which means the appearance intervals of the keywords means time intervals between the appearance. Therefore, Nishimoto teaches determining importance using time period).

As per claim 11, Norihiko and Nishimoto teach all the claimed subject matters as discussed in claim 5, except for explicitly disclosing said message data within a predetermined range are messages received consecutively from a same client. However, the purpose of Norihiko's invention is for a chat participant to be able to hold the flow of the talk easily with another user. It is obvious the messages are received from a same client. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to receive messages from a same client in order to concentrate on the chat with the same user.

As per claim 13, Norihiko and Nishimoto teach all the claimed subject matters as discussed in claim 1, and further teach determining a degree of importance of a keyword stored

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in said memory, depending on whether a user of the apparatus has responded to a received message containing said keyword within a predetermined range (Norihiko, [0018]-[0022]).

Claims 14-19 and 28-33 are rejected on grounds corresponding to the reasons given above for claims 6-11.

Claims 20, 21 are rejected on grounds corresponding to the reasons given above for claims 1 and 10.

As per claim 22, Norihiko and Nishimoto teach all the claimed subject matters as discussed in claim 1, and further teach said importance determiner unit changes a degree of importance of a keyword during a time period when a user of the apparatus is operating an input device of the apparatus and during a predetermined time period after the user stops operating the input device (Norihiko, [0005]-[0012], in a real-time chat system, the user operates an input device that allows the user to type/speak words one by one. There is a time difference between the appearances of each word because the user has to type/speak word by word into the chat system. The keyword calculator changes the weight of the keywords based on the frequency of the keyword. If the user operates the input device over time and types more keywords into the chat system, then the weight of the keyword is raised. If the user stops using the input device and stops input keywords, then the weight of the keywords is not going to be raised. Therefore, the keyword calculator is based on time period and whether the user operates the input device or not).

Claim 23 is rejected on grounds corresponding to the reasons given above for claim 22.

Claims 24-26 are rejected on grounds corresponding to the reasons given above for claims 1 and 10.



As per claim 27, Norihiko and Nishimoto teach all the claimed subject matters as discussed in claim 1, and further teach determining a degree of importance of a keyword in accordance with the number of occurrences of the keyword in a predetermined range of received message data (Norihiko, [0018]-[0022]).

Claim 34 is rejected on grounds corresponding to the reasons given above for claims 1 and 10.

As per claim 35, Norihiko and Nishimoto teach all the claimed subject matters as discussed in claim 1, and further teach determining a degree of importance of a keyword in accordance with an attribute of a received message containing the keyword (Norihiko, [0010]-[0015]).

As per claim 36, Norihiko and Nishimoto teach all the claimed subject matters as discussed in claim 35, and further teach the attribute of said received message is a network, a channel or a client (Norihiko, [0010]-[0015]).

Claims 38-39 and 41-48 are rejected on grounds corresponding to the reasons given above for claims 1-2 and 4-11.

Claims 49-55 are rejected on grounds corresponding to the reasons given above for claims 13-19.

Claims 57-73 are rejected on grounds corresponding to the reasons given above for claims 20-36.

Claim 75 is rejected on grounds corresponding to the reasons given above for claim 1.

Claim 77 is rejected on grounds corresponding to the reasons given above for claim 26.

Claim 78 is rejected on grounds corresponding to the reasons given above for claim 35.

Claims 80 and 81 are rejected on grounds corresponding to the reasons given above for claims 1, 2, 4-11, 13-36.

5. Claims 82 and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norihiko (JP Publication Number: 11-242545) in view of Nishimoto et al. ("Nishimoto", Japanese Patent, Document No. H10-69482) and further in view of Payton (US 6,681,247 B1).

As per claim 82, Norihiko and Nishimoto teach all the claimed subject matters as discussed in claim 1, except for explicitly disclosing deleting a keyword having a degree of importance lower than a threshold value. Payton teaches deleting a keyword having a degree of importance lower than a threshold value (Payton, col. 14, lines 23-27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Norihiko and Nishimoto's combined system by incorporating the deleting means as disclosed by Payton (Payton, col. 14, lines 23-27). The motivation being to deleting un-important keywords so that the user can easily know which keywords is important.

Claim 83 is rejected on grounds corresponding to the reasons given above for claim 82.

### *Response to Arguments*

6. Applicant's arguments filed 7 February 2005 have been fully considered but they are not persuasive.

7. As per applicant's arguments regarding the references do not teach the degree of importance of the keyword stored in the memory is raised in response to the detection of an occurrence of the keyword in a message, and the degree of importance of the keyword is lowered in the absence of the keyword in message have been considered but are not persuasive. Norihiko

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teaches a word with the high frequency of occurrence is detected out of the extracted utterance, the priority of the word in a dictionary is raised (Norihiko, [0005]-[0012]). The keyword is extracted from a message in a real-time chat system. Clearly, the importance of the keyword is raised in response to the detection of an occurrence of the keyword in a message, and the importance of other keyword is not raised/lowered. Therefore, the arguments are not persuasive.

8. As per applicant's arguments regarding the degree of importance of the keyword is changed in accordance with the operating conditions of the apparatus operated by a user have been considered but are not persuasive. Norihiko teaches a real-time chat system. In the chat system, the importance of the keyword with high frequency is raised (Norihiko, [0005]-[0012]). Since it is in a chat system, the frequency of the keyword is depend on the operating conditions of the apparatus operated by the user. If the user operates the input device of the chat system more and types more the keywords into the chat system, then the frequency of the keywords is higher, and the importance of the keyword is raised, and vice verse. Therefore, the degree of importance of the keyword is changed in accordance with the operating conditions of the apparatus operated by a user.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chongshan Chen whose telephone number is (571) 272-4031. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chongshan Chen  
May 12, 2005



JEAN M. CORRIELLUS  
PRIMARY EXAMINER